

Work Order ID 63528

Wednesday, November 03, 2010 2:54:36 PM



Page 1

Item ID: D206-667-203

Accept



Setup Start



Revision ID:

Item Name: Crosstube Aft

Stop



Start Date: 11/3/2010 **Start Qty:** 1.00



Cust Item ID:

Required Date: 11/18/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: **Process Plan:**

1

Date: 12/16/05

Tooling:

Date:

Run Start



oci

Date:

SPC (Y/N):

Date:

Stone



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

130

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Crosstubes

Crosstubes

0.00

Crosstubes

Memo

0.00

Crosstubes

1-Drill pilot holes in tube using drill Jig DT8583 & DT8584 as per Dwg D206-667-243 and drill table DT8577. Locate hole #6 for towers as per QSI 10. Drill all (3) top holes.

2-Drill and Ream all holes in tube to finish size using drill Jig DT8583 & DT8584 as per Dwg D206-667-243 Check dimensions between holes on all four sides.

3-Flip tube and switch drilling Jigs from right to left, left to right. Locate Jigs off existing holes using "T" pins.

4-Drill pilot holes using drill Jig DT8583 & DT8584 as per Dwg D206-667-243. Drill only the top (2) holes.

5-Drill & ream the top (2) holes to finish size using drill Jig DT8583 & DT8584 as per Dwg D206-667-243

6-Drill Fwd rivet holes using drill Jig DT8789FWD as per Dwg D206-667-143. Note: Fwd side has 3x top holes.

7-Drill Aft rivet holes using drill Jig DT8789 as per Dwg D206-667-243.

8-C'sink holes as per Dwg D206-667-243.

9 -Scribe part # and batch # using vibrating stylus as per Dwg D206-667-243
Inside of Cuff(Donot engrave on outside of tube)

10 -Deburr & Inspect for surface damage. Repair damage within limits as per

(1)

SAD
10/11/18

W/O:		WORK ORDER CHANGES					
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Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
StampDwg
D206-667-243

140



HandFXtube

Crosstubes Chemical Conversion

0.00

STOP

Hand Finishing Crosstubes

10-11-19



150



QC

Quality Control

QC3- Inspect Part Finish

0.00

S 10/11/19



Memo

0.00

160



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S 10/11/19



Memo

0.00



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Cust Item ID:

Required Date: 11/18/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

170

Operation
Description

Outsource process - NDT per QSI038 4.1

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

CX 10/11/23 ①

Outsource2

Outsource process - NDT

Memo

Liquid Penetrant Inspection as per QSI 038Or
Issue P/O: 12987
LPI as per ASTM 1417
Level 2 Attach copy of NDT results to work order

180



Packaging

0.00

0.00

Packaging

Packaging

Memo

Ensure copy of NDT results attached to work order.

190



QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

Ensure results are as per Dwg D206-667-243

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

200



SprayPaint

Operation
Description

SprayPaint

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Spray Painting

Memo

0.00

1-Prime inside and outside crosstube as per QSI 005 4.2
2-Paint outside crosstube with White Imron as per QSI 005 4.2

PRIME:

Start Time: 10:00Finish Time: 11:00

PAINT:

Start Time: 3:00Finish Time: 4:00

210



QC

QC14- Inspect Spray Paint

0.00

Quality Control

Memo

0.00

Wrap in plastic bag to protect from scratches

M 10 11 25 ①

AT 10 11 29 ①

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

220



Crosstubes

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

m

10

11

29

(1)

Crosstubes

Memo

0.00

Crosstubes

1-Install nut plates as per Dwg D206-667-243.

230



Crosstubes

Skidtubes

0.00

m

10

11

29

(1)

Crosstubes

Memo

0.00

1-Install support using 0.03" to 0.06" thick layer of magnobond 6398 per QSI 015. Let cure for 12h after installation and prior to packaging. Note: (3) top holes should be facing up.

A/R Magnobond 6398 : 115580 exp.07/2011

2-Install supports and clamps as per Dwg D206-667-243. Torque clamps to 80-

100 in lb m 10/11/30 (1)

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

240



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S 10/11/30

(T)

250



Packaging

Packaging

Pick Kit

0.00

Memo

0.00

10/11/30

260



QC

Quality Control

QC4- 100% Inspect kits for completeness

0.00

S 10/11/30

0.00

B10-121
(1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Cust Item ID:

Required Date: 11/18/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

270

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

11/13/09

Packaging

Packaging

0.00

Packaging

Memo

Identify and pack for shipping as per PPP D206-667-203

Location: 23PPP Rev: D

280



QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

10/12/01 JH

Pho-10-30
P

e Ltd

WORK ORDER CHANGES

EP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Wednesday, November 03, 2010 2:54:40 PM

Page 1

Work Order ID: 63528



Parent Item: D206-667-203



Parent Item Name: Crosstube Aft

Start Date: 11/3/2010

Required Date: 11/18/2010

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:F 05.09.01 Add holes for compatibility with Bell Skidtubes KJ/JLM
 IPP Rev:G 08-06-03 update as per DS19415 (ECN1198) DD verified by:ec
 IPP Rev:H 08-07-18 remove thread masking in step 12 DD verified by:EC
 IPP Rev:I 08-12-15 add magnobond DD verified by:EC
 IPP Rev J 09.01.06 ECN 08-562 EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D206-667-203TRN



Manufactured

No

220

Each

2.0000

1



1

Crosstube Turning Detail

Location	Loc Qty	Loc Code
LG	2	
62633	1	
62634	1	

Location	Loc Qty	Loc Code
LG	2	

D2873-043



Manufactured

No

220

Each

12.0000



2

Nut Plate Assembly

S#

Location	Loc Qty	Loc Code
LG	10	
62380	10	
ST	2	
60981	2	

D2873-045



Manufactured

No

220

Each

10.0000



2

Nut Plate Assembly

DP 10-11-17

M 10 11 28

M 10-11-29

Location	Loc Qty	Loc Code
LG	10	
60982	4	
62378	6	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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Page 2

Work Order ID: 63528



Parent Item: D206-667-203



Parent Item Name: Crosstube Aft

Start Date: 11/3/2010

Required Date: 11/18/2010

Start Qty: 1.00

Required Qty: 1.00

D2892-1



Manufactured No

230

Each

44.0000

2

2



W 10.11.29

Support

Location	Loc Qty	Loc Code
LG	44	
41986	12	
42785	20	
62592	12	

D3595-063-450



Manufactured No

230

Each

68.9990

4

4



W 10.11.29

RUBBER CUSHION

B#63960

Location	Loc Qty	Loc Code
LG	68.99897368	
53775	5.97897368	
58161	3.56	
59580	0.12	
61465	29.34	
62535	30	

MS20601-AD4W10



Purchased No

230

Each

76.0000

14

14



W 10.11.29

RIVET

Location	Loc Qty	Loc Code
LG051	76	
114245	2	
115405	2	

MS21920-22



Purchased No

230

Each

42.0000

4

4



W 10.11.29

Clamp(per MIL-DTL-8783C)

Location	Loc Qty	Loc Code
LG	42	
114077	42	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID: 63528



Parent Item: D206-667-203



Parent Item Name: Crosstube Aft

Start Date: 11/3/2010

Required Date: 11/18/2010

Start Qty: 1.00

Required Qty: 1.00

AN5-10A



Bolt

Purchased

No

250

Each

252.0000

10

10

10/11/2010

AN5-32A



Bolt

Purchased

No

250

Each

252.0000

4

4

10/11/2010

AN5-34A



Bolt

Purchased

No

250

Each

68.0000

4

4

10/11/2010

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Parent Item: D206-667-203



Parent Item Name: Crosstube Aft

Start Date: 11/3/2010

Required Date: 11/18/2010

Start Qty: 1.00

Required Qty: 1.00

AN960JD516

NAS1149D0563J Purchased

No

250

Each

34.0000

18

18



10/11/30

SP MUY742

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST	34	
103694	18	
107534	12	
109287	4	

MS21042L5

Purchased

No

250

Each

731.0000

4

4



10/11/30

SD

Nut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST139	26	
114813	26	
ST300	705	
115156	205	
115594	500	

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

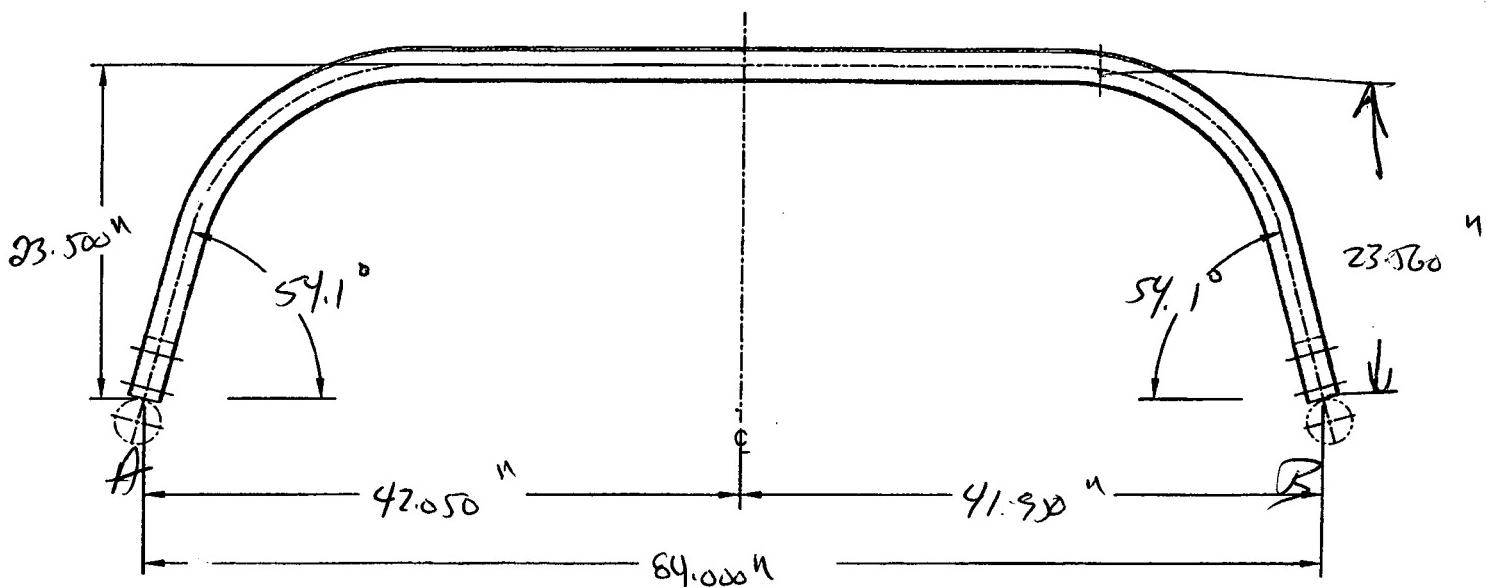
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DART AEROSPACE LTD	Work Order:	13528.
Description: Crosstube High Aft (206L)	Part Number:	D206-667-203
Inspection Dwg: D206-667-243 Rev: C		Page 1 of 1

Required Dimension	Min	Max
Height	23.39	23.65
1/2 Span	41.79	42.05
Angle	54	56
Total Span	83.58	84.1



Comments

QC15 Inspection	S
Date	10/16/18

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	
B	09.11.17	Dwg Rev updated	KJ	
C	09.12.14	Dimensions update per Dwg Rev C	KJ	MM

42.050

41.950

84.000

W/O:		WORK ORDER CHANGES					
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8 7 6 5 4 3 2 1

Item	Qty	Part Number	Description
	-243		
1	X	D206-667-243	CROSSTUBE ASSEMBLY (206L HIGH AFT)
2	1	D6004-115	CROSSTUBE
3	2	D2873-043	NUT PLATE
4	2	D2873-045	NUT PLATE
5	2	D2892-1	SUPPORT
6	4	D3595-063-450	RUBBER CUSHION
7	4	MS21920-22	CLAMP
8	14	MS20601AD4W10	RIVET (OR NAS9302B-4-10)
9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6004-115
FINISHED LENGTH = 104.91 ± 0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 018
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D206-667-243" AND BATCH NUMBER ON INSIDE OF CUFF USING VIBRATING STYLUS.
- 7) WEIGHT: 21.9 lbs
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2892-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-22 CLAMPS WITH D3595-063-450 RUBBER CUSHIONS TO SECURE THE D2892-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMP MECHANISMS ARE LOCATED ON CROSSTUBE SUPPORTS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 63326
BL 10-11-03

RELEASED
BL 10-11-03

C	REVISE GENERAL NOTES/PART LIST (ZN D7-1); REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS. D3595-063-450 WAS D2856-400-773 (ZN D6-2 & A5-2); REMOVED REF. & ADD TOLERANCES (ZN A-3, C5-3, D3-3); RELOCATED FLAG #6 (ZN A8-3) PER NCR 210; MOVED TURNING DETAIL & UPDATED TOLERANCE 10 SHEET 4.	RF	08.11.06
B	ADD HOLES AND NUT PLATES FOR COMPATABILITY WITH BHT/AA SKUDTUBES	PH	05.07.26
A	NEW ISSUE	CP	00.11.17
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>DP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>DP</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>EZ</i>	D206-667-243	SHEET 1 OF 4
APPROVED	<i>DP</i>	TITLE	SCALE
DE APPR.	<i>DP</i>	CROSSTUBE ASS'Y (206L HIGH AFT)	NTS
DATE	08.11.06	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT CONTAINS TRADE SECRET INFORMATION WHICH IS THE PROPERTY OF DART AEROSPACE LTD. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

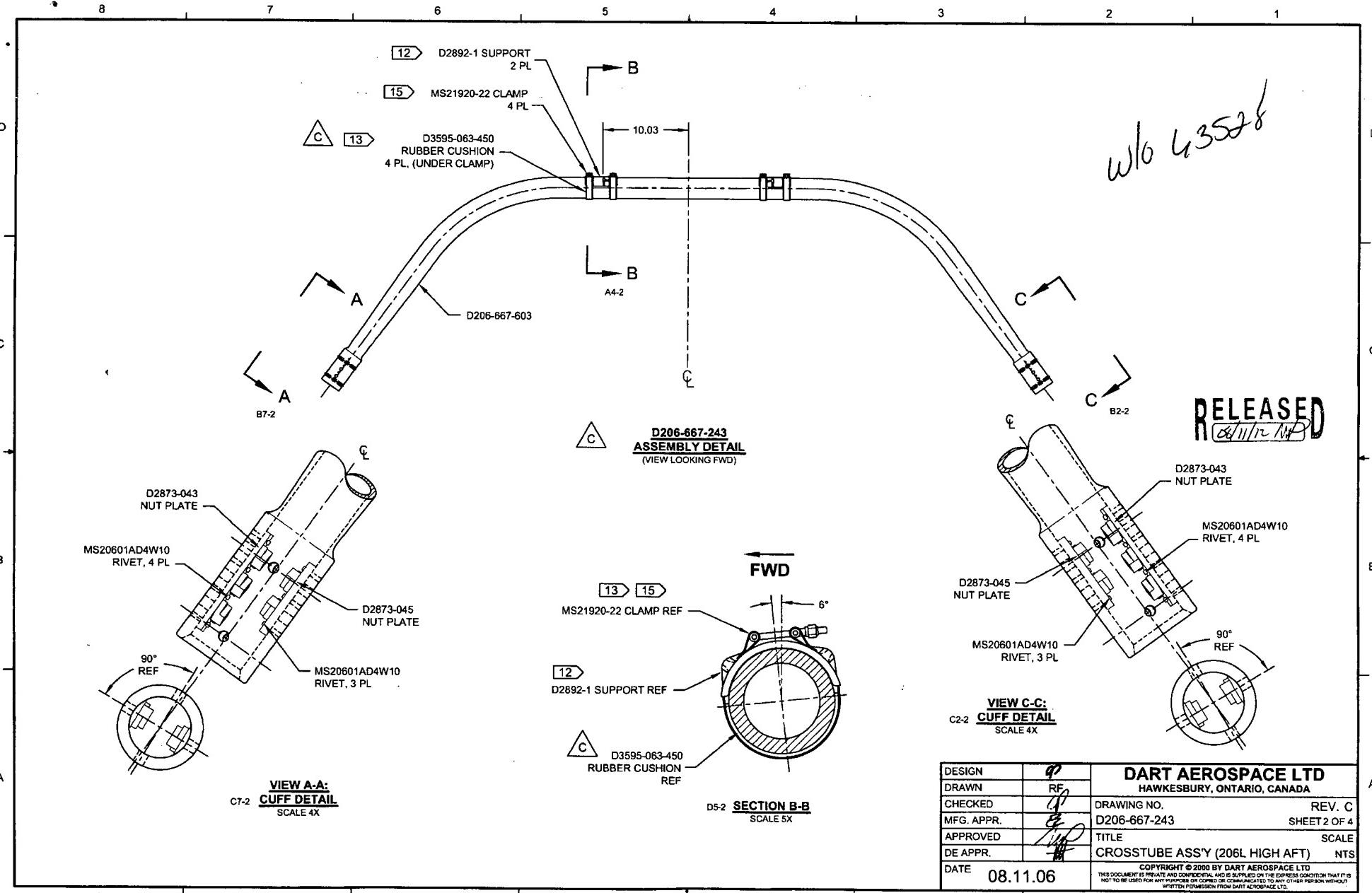
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

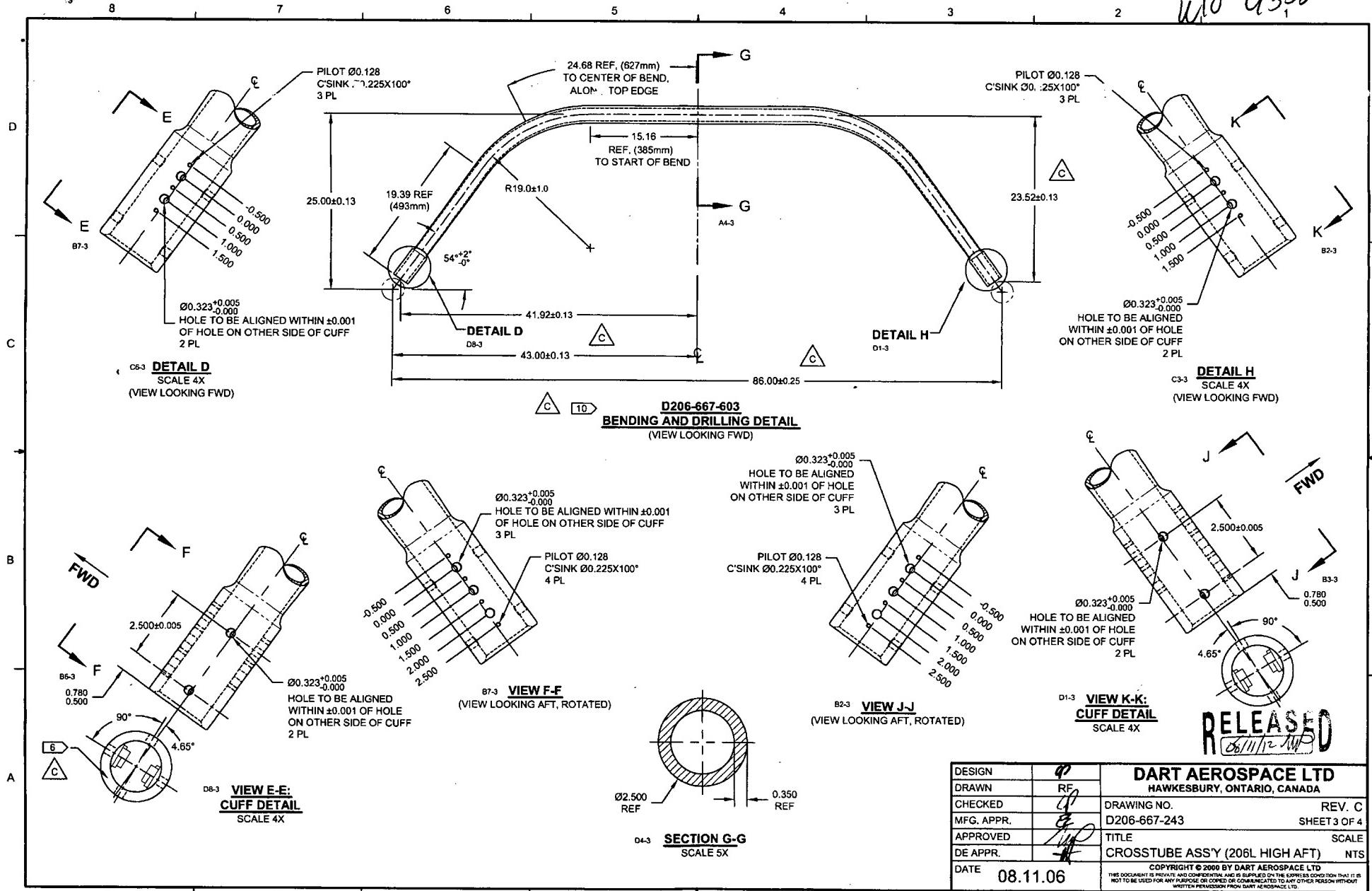
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/0 63528



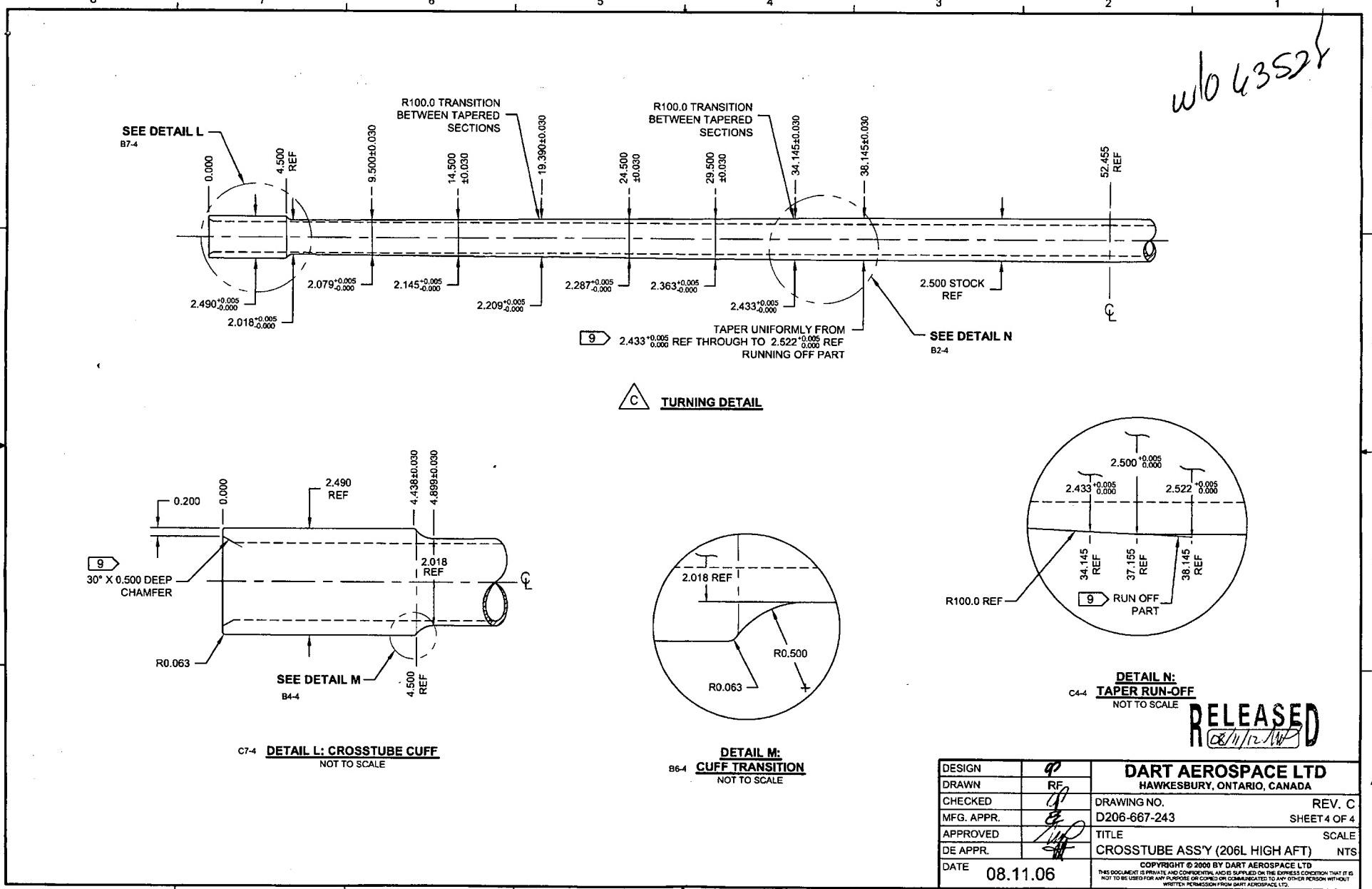
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



LIQUID PENETRANT TEST REPORT

P- 05491

CLIENT	DART AEROSPACE			DATE	NOV-23-2010	TIME	AM <input checked="" type="checkbox"/> PM <input type="checkbox"/>
ATTENTION	LINDA LACELLE / CHARTERED/ TIAW			ACUREN JOB NO.	138-10-0871		
ADDRESS	1270, ABERDEEN ST. HAWLESBURY, ON			PO/WO NO.	1129871		
PROJECT				WORK LOCATION	AS ADDRESS		
ITEM(S) EXAMINED	Wet Fluorescent Testing on "CROSSTUBES" & "MOUNT"			ACCEPTANCE STD.	REV./DATE		
SEE W.O.# Below in Results							

JOB DESCRIPTION	PROCEDURE NO.	LT-002	REV./DATE	2008	TECHNIQUE NO.	LT-002	REV./DATE	2008
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PART NO.	MATERIAL	THICKNESS
		N/A

SCOPE PERFORMED A WET FLUORESCENT INSPECTION BY LIQUID PENETRANT ON 100% OF THE EXTERNAL SURFACE

TEST DETAILS	METHOD	FLUORESCENT	VISIBLE	WATER WASH	SOLVENT REMOVABLE	POST EMULSIFIED
MANUFACTURER	MAGNAFLUX			BLACK LIGHT S/N 13790	OUTPUT > 1000 μ W/cm ²	AMBIENT < 2 fc
ENETRANT	ZL-607	MINIMUM DWELL TIME	10 MIN.	LIGHTING EQUIP.	FLASHLIGHT	TROUBLELIGHT
ENETRANT REMOVER	H ₂ O	MINIMUM DRY TIME	>10 MIN.	OTHER		OUTPUT > 100 fc @ SURFACE
DEVELOPER	SKD-52	MINIMUM DWELL TIME	10 MIN.	LIGHT METER S/N		CAL DUE DATE 12/30/2011
DEVELOPER TYPE	<input checked="" type="checkbox"/> NON AQUEOUS <input type="checkbox"/> AQUEOUS <input type="checkbox"/> DRY					

TEST SURFACE	SURFACE CONDITION	AS GROUND	AS WELDED	MACHINED	SHOT BLASTED	CLEAN BARE METAL
					210°C/50°F TO 52°C/125°F	> 52°C/125°F

RESULTS	(<input type="checkbox"/> METRIC <input checked="" type="checkbox"/> IMPERIAL)
ITEM	COMMENTS
F1	CROSSTUBE - W.O. ID 63507 ✓
F2	CROSSTUBE - W.O. ID 63528 ✓
F3	CROSSTUBE - W.O. ID 63533 ✓
F4	CROSSTUBE - W.O. ID 63539 ✓
F5	CROSSTUBE - W.O. ID 63744 ✓
F6	CROSSTUBE - W.O. ID 63745 ✓
F7	4X Mount(s) - W.O. ID 61889 ✓

CROSSTUBE AFT —
 ITEM ID: D-206-667-203 (ITEM# 1, 2)
 ITEM ID: D-210-664-201 (ITEM# 3, 4, 5)
 ITEM ID: D-210-664-101 (ITEM# 5, 6)
— CROSSTUBE FWD —
MOUNT —
 ITEM ID: D-3687-1 (ITEM# 7)

10-11-23

Scope of Services
 The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood at all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc., based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as presentations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care
 In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES				
CLIENT REPRESENTATIVE	<i>Matt Murdoch</i>		DTR # E 63039	
TECHNICIAN (SIGNATURE):	<i>Matthew Murdoch</i>		REPORT	
NAME (PRINT):			REVIEWED BY:	
CGSB LEVEL	1 ST TECHNICIAN	2 ND TECHNICIAN	NAME	INITIALS
SNT LEVEL	2	2		
CGSB REG. NO.	2049	CGSB REG. NO.		

~~REFERENCE ONLY~~

5.0 PARTS LIST

Item	Qty -011	Qty -013	Qty -015	Qty -101	Qty -201	Qty -103	Qty -203	Qty -105	Qty -205	Part Number	Description	
	X									D206-667-011	SPACER BLOCK KIT	
		X								D206-667-013	NUT PLATE KIT (-101/-103/-105/-203/-205)	
			X							D206-667-015	NUT PLATE KIT (-201)	
				X						D206-667-101	CROSSTUBE INSTALLATION, 206A/B HIGH FWD	
					X					D206-667-201	CROSSTUBE INSTALLATION, 206A/B HIGH AFT	
						X				D206-667-103	CROSSTUBE INSTALLATION, 206L/L-1/L-3/L-4 HIGH FWD	
							X			D206-667-203	CROSSTUBE INSTALLATION, 206L/L-1/L-3/L-4 HIGH AFT	
								X		D407-667-105	CROSSTUBE INSTALLATION, 407 HIGH FWD	
									X	D407-667-205	CROSSTUBE INSTALLATION, 407 HIGH AFT	
1			1							D206-667-141	CROSSTUBE ASSEMBLY, 206A/B HIGH FWD	
2				1						D206-667-241	CROSSTUBE ASSEMBLY, 206A/B HIGH AFT	
3					1					D206-667-143	CROSSTUBE ASSEMBLY, 206L/L-1/L-3/L-4 HIGH FWD	
4						1				D206-667-243	CROSSTUBE ASSEMBLY, 206L/L-1/L-3/L-4 HIGH AFT	
5							1			D407-667-145	CROSSTUBE ASSEMBLY, 407 HIGH FWD	
6								1		D407-667-245	CROSSTUBE ASSEMBLY, 407 HIGH AFT	
10			*2	*2	*2			*2		D2891-1	SUPPORT	
11							*2			D2892-1	SUPPORT	
12									*1	D2894-1	SUPPORT	
13			*2	*2	*2			*2		D2856-400-694	ABRASION STRIP	
14							*2			D2856-400-773	ABRASION STRIP	
15									*1	D2856-600-851	ABRASION STRIP	
16			*4	*4	*4			*4		MS21920-20	CLAMP	
17									*4	MS21920-22	CLAMP	
18										*2	MS21920-24	CLAMP
19			4	4	4			4		AN5-32A	BOLT	
20							4			AN5-34A	BOLT	
21			4	4	4		4	4		MS21042L5	NUT (OR MS21042-5)	
22			8	8	8		8	8		AN960JD516	WASHER	
23										*2	D3190-1	CHAFING SHIELD
30	8									AN4-6A	BOLT	
31	8									AN4-7A	BOLT	
32	16									AN960JD416	WASHER	
33	2									D3193-041	SPACER BLOCK ASSEMBLY	
40	2		*2		*2	*2	*2	*2		D2873-043	NUT PLATE	
41	2			*2		*2	*2	*2		D2873-045	NUT PLATE	
42			2		2					D2872-043	NUT PLATE	
43			2		2					D2872-045	NUT PLATE	
44	10		10		10					AN5-7A	BOLT	
45	10	10		10			10	10	10	AN5-10A	BOLT	
46	4	4	4	10	4			4		AN5-30A	BOLT	
47	4							4		AN5-32A	BOLT	
48	18	18	10	12	10		10	10	10	AN960JD516	WASHER	
49	4	4			6					MS21042L5	NUT (OR MS21042-5)	

*REFERENCE ONLY. PARTS ARE INCLUDED IN D206-667-141/241/143/243, & D407-667-145/245 ASSEMBLIES ABOVE